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| 40064 | 7590 | 01/19/2006 | EXAMINER | |
| LEMAIRE PATENT LAW FIRM, P.L.L.C. | | | | COOLEY, CHARLES E |
| PO BOX 11358 | | ART UNIT | | PAPER NUMBER |
| ST PAUL, MN 55111 | | 1723 | | |

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

| | | | |
|-----------------|-------------------|--------------|---------------|
| Application No. | 10/724,432 | Applicant(s) | GORHAM ET AL. |
| Examiner | Charles E. Cooley | Art Unit | 1723 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 03 November 2005.
2a) This action is **FINAL**. 2b) This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1 and 13-31 is/are pending in the application.
4a) Of the above claim(s) 26-31 is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1,13,18 and 20-25 is/are rejected.
7) Claim(s) 14-17 and 19 is/are objected to.
8) Claim(s) 1 and 13-31 are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
10) The drawing(s) filed on 28 November 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11032005.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

FINAL OFFICE ACTION

Election By Original Presentation

1. Newly submitted claims 26-31 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:
2. The inventions of amended claim 1 and new claim 21 are not independent and distinct from each other or the originally presented apparatus and will thus be considered on the merits along with their dependent claims. However, the inventions of claims 1 and 26 are related as subcombination and combination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination does not require a rotor assembly with sets of nested cylinders having one or more openings at ends thereof. The subcombination has separate utility such as its use without a frame.
3. The inventions of claims 21 and 26 are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the apparatus as claimed can be used to practice another and materially different process such as a process lacking providing a rotor assembly with sets of nested cylinders having one or more openings at ends thereof.

Since applicant has received an action on the merits for the originally presented invention, the invention defined by claim 26 has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 26-31 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Information Disclosure Statement

4. Note the attached PTO-1449 form submitted with the Information Disclosure Statement filed 03 NOV 2005.

Specification

5. The substitute abstract is acceptable.

6. The amended title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed (MPEP 606.01).

The title should mention the concentric cylinders.

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 C.F.R. § 1.75(d)(1) and M.P.E.P. § 608.01(l).

Correction of the following is required:

8. The underlined subject matter added to the end of claim 1 and corresponding language in new claim 21. This subject matter is deemed to lack positive antecedent basis in the specification as originally filed but is deemed to be reasonably supported by the drawing figures.

608.01(o) [R-2] Basis for Claim Terminology in Description

The meaning of every term used in any of the claims should be apparent from the descriptive portion of the specification with clear disclosure as to its import; and in mechanical cases, it should be identified in the descriptive portion of the specification by reference to the drawing, designating the part or parts therein to which the term applies. A term used in the claims may be given a special meaning in the description. No term may be given a meaning repugnant to the usual meaning of the term.

Usually the terminology of the original claims follows the nomenclature of the specification, but sometimes in amending the claims or in adding new claims, new terms are introduced that do not appear in the specification. The use of a confusing variety of terms for the same thing should not be permitted.

New claims and amendments to the claims already in the application should be scrutinized not only for new matter but also for new terminology. While an applicant is not limited to the nomenclature used in the application as filed, he or she should make appropriate amendment of the specification whenever this nomenclature is departed from by amendment of the claims so as to have clear support or antecedent basis in the specification for the new terms appearing in the claims. This is necessary in order to insure certainty in construing the claims in the light of the specification, *Ex parte Kotler*, 1901 C.D. 62, 95 O.G. 2684 (Comm'r Pat. 1901). See 37 CFR 1.75, MPEP § 608.01(i) and § 1302.01. >Note that examiners should ensure that the terms and phrases used in claims presented late in prosecution of the application (including claims amended via an examiner's amendment) find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description, see 37 CFR 1.75(d)(1). If the examiner determines that the claims presented late in prosecution do not comply with 37 CFR 1.75(d)(1), applicant will be required to make appropriate amendment to the description to provide clear support or antecedent basis for the terms appearing in the claims provided no new matter is introduced.<

The specification should be objected to if it does not provide proper antecedent basis for the claims by using form paragraph 7.44

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 13, 18, 21, 22, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Pelzer et al. (US 4,030,897).

The patent to Pelzer et al. '897 discloses a centrifuge and a method including a rotor assembly (Fig. 1) supported for rotation about an axis, the rotor assembly having a first set 4, 6, 8 and a second set 5, 7, 9 of nested cylinders each having a plurality of concentric cylinders; each cylinder having one or more openings at a first end (the openings between the distal end of the cylinder and the respective end walls 1 or 3) and one or more openings 19 at an opposite second end, the cylinders defining a plurality of concentric liquid passageways configured for parallel unidirectional flow of the liquids through the plurality of concentric liquid passageways; wherein the plurality of concentric liquid passageways extend radially and axially as seen in Fig. 1; the sets 4-9 being rotatably supported together (Fig. 1); the cylinders having surfaces thereon; liquids being supplied to the rotor assembly via feed inlet 11; the liquid being centrifuged by the rotor assembly by parallel flow through the nested cylindrical passageways; the feed liquid introduced in a radial manner via radial plate 13; clarified liquid being removed via openings 18 and/or 19; when viewing Fig. 1 in an inverted manner, the feed liquid being supplied at a lower end of the plurality of nested concentric cylindrical passageways via feed inlet 11 and the clarified liquid being removed from an upper end of the plurality of nested concentric cylindrical passageways via openings 18 and/or 19.

11. Claims 1, 13, 18, 21, 22, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Strid et al. (US 5,935,053).

The patent to Strid et al. discloses a centrifuge and a method including a frame 2; a rotor assembly 1 (Fig. 1) supported for rotation about an axis, the rotor assembly 1 having a first set (such as 21, 23, etc.) and a second set (22, the cylinder adjacent 23, etc.) of nested cylinders each having a plurality of concentric cylinders; each cylinder having one or more openings at a first end (proximate 29) and one or more openings 31 (Fig. 3) at an opposite second end (see the openings in Figs. 3-5), the cylinders defining a plurality of concentric liquid passageways configured for parallel unidirectional flow of the liquids through the plurality of concentric liquid passageways; wherein the plurality of concentric liquid passageways extend radially and axially as seen in Fig. 1; the sets being rotatably supported together (Fig. 1); the cylinders having surfaces thereon; liquids being supplied to the rotor assembly via feed inlet 12; the liquid being centrifuged by the rotor assembly by parallel flow through the nested cylindrical passageways; the feed liquid introduced in a radial manner (see flow arrows in Fig. 1); clarified liquid being removed via openings 13, 14, and/or 15 (Fig. 2); when viewing Fig. 1 in an orientation 90 degrees displaced from that seen in Fig. 1, the feed liquid being supplied at a lower end of the plurality of nested concentric cylindrical passageways via feed inlet 12 and the clarified liquid being removed from an upper end of the plurality of nested concentric cylindrical passageways via openings 13, 14, and/or 15.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. **Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pelzer et al. (US 4,030,897) or Strid et al. (US 5,935,053) in view of Dudrey (US 3,861,584).**

Pelzer et al. (US 4,030,897) or Strid et al. (US 5,935,053) disclose the rotor assembly being charged with feed liquid from some source but not a machine tool. The patent to Dudrey '584 discloses an analogous centrifuge with a rotor assembly (Fig. 1) that is charged with feed liquid via a feed pipe 40 fed from a machine tool (col. 2, line 66 through col. 3, line 4). Since the centrifuge and rotor assemblies of Pelzer et al. or Strid

et al. are charged with liquid from some source, it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the centrifuges of Pelzer et al. or Strid et al. with feed liquid from a machine tool as suggested by Dudrey '584 for the purpose of separating the machine tool discharge into clarified liquid phase suitable for reuse and a solids phase.

15. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strid et al. (US 5,935,053) in view of Dudrey (US 3,861,584).

Strid et al. (US 5,935,053) discloses a bowl body 2 surrounding the nested cylinders with an outlet opening 13, 14, or 15 but does not disclose the braking step. The patent to Dudrey '584 discloses an analogous centrifuge with a rotor assembly (Fig. 1) that is charged with feed liquid via a feed pipe 40 fed from a machine tool (col. 2, line 66 through col. 3, line 4). A brake 56 functions to brake one element of the centrifuge relative to other elements of the centrifuge. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the method of Strid et al. with a braking step as suggested by Dudrey '584 for the purpose of purging solids from the centrifuge (col. 1, line 64 through col. 2, line 5 and col. 3, lines 36-40).

Allowable Subject Matter

16. Claims 14-17 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
17. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

The prior art of record does not teach or fairly suggest the a brake coupled to the first set of concentric cylinders to selectively brake the rotation of the first set relative to the second set.

Response to Amendment

18. Applicant's arguments with respect to the pending claims have been considered but are deemed to be moot in view of the new grounds of rejection necessitated by amendment.

Applicant is reminded that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of

terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Turning to the rejection of the claims under 35 U.S.C. § 102(b), it is noted that the terminology in a pending application's claims is to be given its broadest reasonable interpretation (*In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)) and limitations from a pending application's specification will not be read into the claims (*Sjolund v. Musland*, 847 F.2d 1573, 1581-82, 6 USPQ2d 2020, 2027 (Fed. Cir. 1988)). Anticipation under 35 U.S.C. § 102(b) is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention. See *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1570, 7 USPQ2d 1057, 1064 (Fed. Cir.), cert. denied, 488 U.S. 892 (1988); *RCA Corp. v. Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). Moreover, anticipation by a prior art reference does not require either the inventive concept of the claimed subject matter or the recognition of properties that are inherently possessed by the prior art reference. *Verdegaal Brothers Inc. v. Union Oil co. of California*, 814 F.2d 628, 633, 2 USPQ2d 1051, 1054 (Fed. Cir. 1987), cert. denied, 484 U.S. 827 (1987). A prior art reference anticipates the subject matter of a claim when that reference discloses each and every element set forth in the claim (*In re Paulsen*, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994) and *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990)); however, the law of anticipation does not require that the reference teach what Applicant is claiming, but only that the claims "read on" something disclosed in the

reference. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984) (and overruled in part on another issue), *SRI Intel v. Matsushita Elec. Corp. Of Am.*, 775 F.2d 1107, 1118, 227 USPQ 577, 583 (Fed. Cir. 1985). Also, a reference anticipates a claim if it discloses the claimed invention such that a skilled artisan could take its teachings in combination with his own knowledge of the particular art and be in possession of the invention. See *In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995), cert. denied, 116 S.Ct. 1362 (1996), quoting from *In re LeGrice*, 301 F.2d 929, 936, 133 USPQ 365, 372 (CCPA 1962).

With respect to the applied prior art under 35 U.S.C. § 102(b), the examiner has explicitly demonstrated how the references above disclose each and every element set forth in the claims and how the pending claims read on the disclosures of the reference, hence the rejections are considered proper.

In conclusion, the amendments made in the instant application are not deemed of a substantive nature to define over the prior art and thus the rejections are considered proper.

Conclusion

19. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION. ANY RESPONSE FILED AFTER THE MAILING DATE OF THIS FINAL REJECTION WILL BE SUBJECT TO THE PROVISIONS OF MPEP 714.12 AND 714.13.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri. All official facsimiles should be transmitted to the centralized fax receiving number 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink that reads "Charles" followed by a small, stylized flourish.

Charles E. Cooley
Primary Examiner
Art Unit 1723

16 January 2006